METRO GREENSPACES GRANT 2006 FINAL REPORT

Tualatin Hills Park and Recreation District West Woods Project

August 30, 2006



Serving Beaverton and the west side since 1955.

Metro Greenspaces Grant 2006 Final Report

Cooperator: Tualatin Hills Park and Recreation District

Project Title: West Woods Project

Cooperative Agreement Number: #1448-13420-03-J333

Date: July 30, 2006

Time Covered: September 2003 through July 30, 2006

PROJECT OVERVIEW:

Project summary from original grant application

O The Tualatin Hills Nature Park, located in Beaverton, Oregon, is requesting \$5,040 to restore degraded, native plant community diversity and structure in the West Woods portion of the Park. The Woods are a mosaic of western redcedars, ash-forested wetlands, and Beaverton Creek's riparian zone. We intend to create contiguous habitat for wildlife by decommissioning "illegal" trails by planting native vegetation, preserving existing habitat by improving trails, and enhancing community links to citizens and groups through educational programs and involvement in the restoration.

Revisions made to original grant goals

- When we began implementing this project we soon came to realize that in the initial evaluation of the area we overlooked several problems that have surfaced along the property boundaries with the Wood Creek Apartments (the neighbor to the south in this section of the Park.) These issues included people still using the unofficial trails to access the park, a nonnative plant species originating from one of many dump sites that were uncovered when Himalayan blackberry removal began, an invasive seed source on the other side of the fence, and a continuous source of garbage. The need to resolve these issues in order to achieve our overall project goals has encouraged us to reprioritize some of our efforts.
- The grant application included purchase of a water tank/trailer to help establish plantings in remote areas. The initial purchase was of a 25-gallon spray tank on wheels. This product's small size and weak pump, proved more of a hindrance than a solution to getting plants established. Once travel time moving the trailer to the watering site via a utility vehicle was factored in, it took over six hours to thoroughly water the first years' plantings. A volunteer has since helped us develop a custom watering system that transports 50 gallons of water at a time and delivers it via a 12-volt vehicle battery. We have attempted to schedule our plantings as early as possible during the dormant season, preferably in November, so that the plants can become well established before the dry season. Ideally this will reduce and in some cases eliminate the need to water most plantings.
- Annual invasives have become an issue as we have removed woody invasives and loosened the soil during invasive removal and planting

activities. In this last year we have tried to spread the seeds of native pioneer species to deter this invasive reintroduction. The results of this effort are not yet evident. We have also focused the work of our young volunteers on pulling these non-native annual species.

ACCOMPLISHMENTS:

Invasive removal

- Volunteers, episodic and a few dedicated regulars have done a majority of the invasive removal that has been completed as part of this restoration project.
- We focused our efforts on removing English ivy, Himalayan blackberries, the garden escapee lamium "yellow archangel" (Lamium galeobdolon), teasel, wall lettuce, and English holly. We removed large monocultures of blackberry along the southern edge of the project area by knocking down the brambles and hand digging the root balls. We also cut ivy off of dozens of trees and heavily thinned out the population that was growing prostrate to a much-reduced density.

Trail maintenance

- The Beaverton Optimist Club along with other volunteers built the Ash Trail boardwalk and created gravel transition ramps to the boardwalks.
 Local firms donated design services and permits for the boardwalk project.
- O Staff continues to monitor the trail surfaces and apply new layers of wood chips to keep the surfaces in good condition.

Plantings

- O Plantings within the West Woods have been especially effective in deterring off-trail usage in conjunction with the temporary fencing. We purposefully worked to get new plantings established in bare areas near the official trails, creating dense vegetation patches that in turn discourage park visitors from cutting across areas not intended as trails.
- O With each planting we used plastic, waterproof labels (purchased from Gardenware of Cannon Beach, Oregon) that were printed on our office laserjet printers to label the individual plants. These labels have proven to be fade-resistant and weather proof, but not vandal proof. Many of them have been pulled off of the plants and discovered in various locations around the park. The labels have been effective in monitoring which plantings were most successful based on when they were planted as well as the size and source of the plant material.

Trail obliterations/Protective fencing

Nature Park staff and volunteers installed five foot tall protective fencing that consists of wire mesh and metal fence posts. We made sure that the installed fence extended past the area where there was obvious off-trail use. The fence sections were installed in seven locations where people were cutting corners and using unofficial trails, and creating disturbances in what would otherwise be continuous wildlife habitat. The fencing has proved to be very effective, and the plants placed to obliterate the trail are successfully establishing themselves. We were able to remove a third of the fencing within two years of placing it, and then we recycled it to use in other areas of the park for the same purpose.

Public education/Outreach

- A continuing challenge regarding making this project a long-term success has been our efforts to try to establish a positive relationship with the neighboring apartment complex, a major source of garbage and weed seeds entering the adjacent section of the project site. (See area "D" on site map.) Ownership of the complex has changed hands at least once during this project and the onsite management staff has turned over several times. We have worked hard to be better neighbors, keeping plants from growing through the fence onto their property by establishing a clear space two feet in from the fence. This spring they have started mowing down the weed species on their side of the fence and have made somewhat of an effort to keep the garbage cleaned up, so that it does not get blown under the fence as was often happening in the past.
- A variety of organizations from throughout the community have been involved in trail maintenance and restoration activities throughout the length of this project. Beaverton Optimists were a key component to getting the boardwalk constructed on the Ash Trail. (A full list of the organizations who have been represented at the volunteer events are included on the Volunteer Hour Time Log). Several of our trained Stewardship Leaders (volunteers who have been trained to lead restoration projects) have really taken pride in the grant project, and have taken it upon themselves to educate other volunteers and visitors about our efforts in the West Woods.
- A very successful program that we established has been an in-house partnership with our grade school age summer camp program, Nature Explorers Camp. Each Friday during the summer the camp counselors led these children on a one to two hour volunteer project. They pulled wall lettuce and lamium in addition to helping with the labeling of restoration plantings. The children were excited to get involved in a restoration project and their work and enthusiasm has been an evident part of our restoration efforts.

ONGOING TASKS:

Invasive removal

- Although we have removed a majority of the invasives in the project area, efforts will still continue, especially along the park boundaries, where a plentiful non-native seed bank remains.
- o Invasive small tree species did not get the attention that we had originally planned to give them during the implementation of this project. We will begin treating English holly, English hawthorn, and non-native cherry

species that are more than 1.5 inches in diameter this fall with a drill and herbicide treatment. During the winter we will use Weed Wrenches (tools that we have purchased for removing Scotch broom at other sites) to remove the smaller individuals of these species.

Trail maintenance

O Heavy winter rains in 2006 caused damage to several lengths of the chipped sections on Ash Trail. The Beaverton Optimists have again committed to coordinate the necessary repairs; including edging the trails and laying down a synthetic trail fabric under new layers of wood chips.

Trail obliteration/Protective fencing

O We will continue to monitor the recovery of areas where unofficial trail existed. We will also remove the remainder of the fencing when we feel comfortable with the state of the habitat. We are also prepared to reinstall fencing in any areas where unofficial trails begin to redevelop.

ATTACHMENTS:

- **Budget:** This spreadsheet outlines what money was spent towards this project over the last three years and what the source of the funding was for each individual purchase.
- **Project Schedule:** The schedule shows the progressive steps that we have completed to facilitate the grant project.
- Volunteer Hours: This time log shows the activities that volunteers participated in as related to the project, organizations that were represented by volunteers, and the value of their time. This value has been adjusted from our previous reports to represent the value given by Independent Sector (www.independentsector.org).
- Staff Hours: This chart shows which staff members logged time, what they were doing in relation to the project, and what the value of their time was according to their current pay rate from the Tualatin Hills Park and Recreation District.
- Project Site Map: A map of the area lays out where the major restoration efforts were focused within the project site.
- **Photo Point Monitoring:** Included are photo points for sixteen sites within the project area, demonstrating the progress that the project has made. Some photos were lost to a computer malfunction, so gaps exist.

WEST WOODS PROJECT BUDGET

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boardwalk permit Mr. Fred Gast and Polygon NW Boardwalk blueprints THPRD (General Fund) boardwalk material THPRD (General Fund) boardwalk material THPRD (General Fund) boardwalk material THPRD (General Fund) plants \$2215.87 water tank trailer \$2216.87 plants \$2216.87 water tank trailer \$2216.87 plants \$2216.87 weed wrench \$119.10 tools and barrier fencing \$226.00 plants \$226.00 plants \$226.00 plants \$227.73 fence repair material THPRD (General Fund) \$226.00 plants \$227.73 weed barrier and staples \$113.40 plants \$5 gallon durms \$5.00 plants \$5 gallon durms \$6.00 plants \$6.00 plants \$6.00 plants \$6.00 plants \$6.00 plants \$6.00 plants		drawings and specifications for boardwalk	Mr. Mike Miller and MGH (pro-bono)		\$5,000.00	\$5,000.00
Boardwalk blueprints THPRD (General Fund) boardwalk material THPRD Foundation, THPRD Challenge Crent, Beaverton Optimist Club, and United Way Crent, Beaverton Optimist Club, and United Way boardwalk material THPRD (General Fund) \$568.50 plants \$221.87 plants \$224.84 plants \$226.00 weed wrench \$224.84 plants \$242.50 weed barrier fencing THPRD (General Fund) \$247.73 fence repair material THPRD (General Fund) \$113.40 plants \$25 gallon drums \$26.00 plants \$25 gallon drums \$6.00 plants \$25 gallon drums \$6.00 plants \$25 gallon drums \$25.00 plants \$25 gallon drums \$25.00	City of Beaverton	boardwalk permit	Mr. Fred Gast and Polygon NW		\$277.00	\$277.00
Department THPRD Foundation, THPRD Challenge	Beaverton Blueprinting	Boardwalk blueprints	THPRD (General Fund)		\$10.71	\$10.71
boardwalk material THPRD (General Fund) boardwalk material THPRD (General Fund) plants barrier fencing water tank trailer plants bare root plants blants b	BMC West	boardwalk material	THPRD Foundation, THPRD Challenge Grant, Beaverton Optimist Club, and United Way		\$9,346.20	\$9,346.20
boardwalk material THPRD (General Fund) plants barrier fencing water tank trailer plants bare root plants bare root plants bare root plants bare root plants weed wrench tools and barrier fencing fence repair material plants pl		boardwalk material	THPRD (General Fund)		\$398.65	\$398.65
Plants P	BMC West	boardwalk material	THPRD (General Fund)		\$398.65	\$398.65
barrier fencing water tank trailer	NW Native Plant Inc.	plants		\$568.50		\$568.50
water tank trailer plants bare root plants n laser plant labels weed wrench tools and barrier fencing fence repair material plants pla	Home Depot	barrier fencing		\$215.87		\$215.87
Plants P	Northern Tool	water tank trailer		\$324.84		\$324.84
bare root plants	NW Native Plant Inc.	plants		\$297.50		\$297.50
Progam laser plant labels weed wrench tools and barrier fencing tence repair material y Native plants sery y Native plants ce Inc pipe fittings sery weed barrier plants ce Inc pipe fittings sery weed barrier plants plants sery weed barrier plants plants sery weed barrier plants plants sery plants plant	02/11/04 BES Watershed	bare root plants		\$119.10		6440
laser plant labels weed wrench weed wrench tools and barrier fencing THPRD (General Fund) Second Staples Sery weed barrier and staples Sery weed barrier Sery Wative Plants Sery Pump Sery Pump Sery	Revegetation Progam					91.9.1
weed wrench tools and barrier fencing fence repair material THPRD (General Fund) \$ plants \$ \$ pipe fittings \$ \$ plants \$ \$ plants \$ \$ plants \$ \$ plants \$ \$ Pump \$ \$ pipe fittings \$ \$	03/08/04 Gardenware	laser plant labels		\$42.50		\$42.50
ce & tools and barrier fencing THPRD (General Fund) \$ ce & fence repair material THPRD (General Fund) \$ y Native plants \$ sery weed barrier and staples \$ y Native plants \$ ce Inc 55 gallon drums \$ ce Inc 55 gallon drums \$ sery weed barrier \$ Natives plants \$ y Native plants \$ Pump \$ pipe fittings \$	New Tribe	weed wrench		\$208.00		\$208.00
ce & fence repair material THPRD (General Fund) y Native plants \$ y Natives plants \$ sery weed barrier and staples \$ y Native plants \$ ce Inc 55 gallon drums \$ pipe fittings -\$ sery weed barrier \$ sery weed barrier \$ sery plants \$ y Native plants \$ Pump \$ pipe fittings \$	Home Depot	tools and barrier fencing		\$247.73		\$247.73
Scholls Valley Native plants Nursery Echo Valley Natives plants Echo Valley Natives plants Scholls Valley Natives Scholls Valley Native plant labels Carton Service Inc 55 gallon drums Home Depot pipe fittings Echo Valley Natives plants Echo Valley Natives plants Scholls Valley Natives plants Gi Joes Home Depot plants Echo Valley Natives plants Gi Joes Home Depot plants Echo Valley Natives plants Gi Joes Home Depot plants Echo Valley Natives plants Figure Inchange plants Figure	Reliable Fence & Construction	fence repair material	THPRD (General Fund)		\$300.00	\$300.00
Echo Valley Natives plants Echo Valley Natives plants Scholls Valley Native plant labels Carton Service Inc 55 gallon drums Home Depot Home Depot plants Echo Valley Native plants Scholls Valley Native plants Echo Valley Native plants Scholls Valley Native plants Gardinger Pump Home Depot plants Echo Valley Native plants Echo Valley		plants		\$342.50		\$342.50
Teufel's Nursery weed barrier and staples Scholls Valley Native plants Nursery Gardenware Service Inc 55 gallon drums Home Depot Poter Plant labels REIMBURSEMENT Teufel's Nursery Weed barrier Echo Valley Native plants Scholls Valley Native plants Grainger Pump Home Depot Pump Gl Joes Home Depot Pump Home Depot Plants Home Depot Pump Home Depot Plants Home Depot Pump Home Depot Pump Home Depot Plants Home Depot	Echo Valley Natives	plants		\$726.50		\$726.50
Scholls Valley Native plants Nursery Gardenware laser plant labels Carton Service Inc 55 gallon drums Home Depot pipe fittings Echo Valley Natives plants Scholls Valley Natives plants Scholls Valley Natives plants Gi Joes Battery and charger grainger Home Depot plants Scholls Valley Natives plants Gi Joes Battery and charger grainger Home Depot plants Scholls Valley Native plants Grainger Pump Home Depot plants	Teufel's Nursery	parrier and		\$113.40		\$113.40
Gardenware laser plant labels Acardenware Laser plant labels Acardenware Acardenwa	Scholls Valley Native			\$105.00		\$105.00
Carton Service Inc 55 gallon drums \$ Home Depot -\$3.4 REIMBURSEMENT -\$3.4 Teufel's Nursery weed barrier \$ Echo Valley Natives plants \$ Scholls Valley Native plants \$ Nursery Battery and charger \$ GI Joes Bump \$ Grainger Pump \$ Home Depot pipe fittings \$	Gardenware	laser plant labels		\$83.15		\$83.15
Home Depot pipe fittings -\$3,4 REIMBURSEMENT \$ Teufel's Nursery weed barrier \$ Echo Valley Natives plants \$ Scholls Valley Native plants \$ Nursery Battery and charger \$ GI Joes Pump \$ Grainger Pump \$ Home Depot pipe fittings \$	Carton Service Inc	55 gallon drums		\$50.00		\$50.00
REIMBURSEMENT -\$3 Teufel's Nursery weed barrier -\$3 Echo Valley Natives plants Scholls Valley Native plants Nursery Battery and charger GI Joes Pump Grainger Pump Home Depot pipe fittings	Home Depot	pipe fittings		\$8.88		\$8.88
Teufel's Nurseryweed barrierEcho Valley NativesplantsScholls Valley NativeplantsNurseryBattery and chargerGI JoesPumpHome Depotpipe fittings	REIMBURSEMENT			-\$3,453.47		-\$3,453.47
Echo Valley Natives plants Scholls Valley Native plants Nursery GI Joes Grainger Pump Home Depot pipe fittings	Teufel's Nursery	weed barrier		\$54.50		\$54.50
Scholls Valley Native plants Nursery GI Joes Grainger Home Depot	Echo Valley Natives	plants		\$620.00		\$620.00
GI Joes Battery and charger Grainger Pump Home Depot pipe fittings	Scholls Valley Native	plants		\$367.50		\$367.50
Grainger Pump Anne Depot pipe fittings	GI Joes	Battery and charger		\$118.98		\$118.98
Home Depot pipe fittings				\$111.02		\$111.02
	Home Depot	pipe fittings		\$47.47		\$47.47
Final Reimsursement			1 Reimbu	5	404 704 04	£47 059 96

PROJECT SCHEDULE

SEASON	TASK
Summer 2004	* Watering
	*Care and weeding around plantings
Fall 2004	* Watering
	* Recruit volunteers for invasive removal and planting.
	* Invasive removal
	* Planting phase 2 - more extensive
	* Monitoring
	* Care and weeding around plantings
Winter 2004-5	* Finish planting phase 2
	* Invasive removal
	* Care and weeding around plantings
Spring 2005	* Watering as needed
	* Monitoring
	* Care and weeding around plantings
Summer 2005	* Watering
	* Continue outreach to neighborhood businesses and organizations
	* Care and weeding around plantings
	* Invasive removal
Fall 2005	* Watering
	* Additional and replacement plantings
	* Monitoring
	* Care and weeding around plantings
	* Invasive removal
Winter 2006	* Invasive removal
	* Care and weeding around plantings
Spring 2006	* Invasive removal
	* Monitoring
	* Care and weeding around plantings
Summer 2006	* Watering
	* Invasive removal
	* Write/submit final report

VOLUNTEER HOURS Time Log

Date	Number of volunteers	Organizations represented	Activity	Total Hours	Value per hour	Extended Value
09/10/03	57	George Fox	Invasive plant removal	342	\$17.19	\$5,878.98
09/13/03	22	Intel, SOLV	Invasive plant removal, Garbage	88	\$17.19	\$1,512.72
10/23/03	25	Merlo HS	Invasive plant removal	75	\$17.19	\$1,289.25
11/16/03	9	PCC	Planting	26.5	\$17.19	\$455.54
01/25/04	3		Planting	10.5	\$17.55	\$184.28
01/26/04	8	La Transporte Contraction	Planting	32	\$17.55	\$561.60
02/21/04	42	Nike, PCC, Cub Scouts, Beaverton Nazarene, Aloha HS, SOLV	Invasive plant removal, Garbage	168	\$17.55	\$2,948.40
02/22/04	10	Aloha HS	Invasive plant removal	40	\$17.55	\$702.00
02/27/04	18	Merlo HS	Invasive plant removal	72	\$17.55	\$1,263.60
03/13/04	11	Valley Catholic HS, Aloha HS	Invasive plant removal	32	\$17.55	\$561.60
03/20/04	12		Invasive plant removal	21.5	\$17.55	\$377.33
03/27/04	1		Planting	2	\$17.55	\$35.10
04/24/04	61	IBM, Starbucks, McCallister College Alumni, Xerox, PAC, Valley Catholic HS, Aloha HS	Invasive plant removal	244.0	\$17.55	\$4,282.20
04/25/04	5		Invasive plant removal	18	\$17.55	\$315.90
09/14/04	8	Westview HS	Invasive plant removal	23	\$17.55	\$403.65
10/16/04	6		Invasive plant removal	21	\$17.55	\$368.55
10/17/04	10	Southridge HS, Conestoga MS	Invasive plant removal	60	\$17.55	\$1,053.00
11/21/2004	9	Metro, Southridge HS	Planting	35	\$17.55	\$614.25
1/23/2005	7	Southridge HS, Beaverton HS	Invasive plant removal	27	\$18.04	\$487.08
2/19/2005	18	Southridge HS, PSU, PCC,	Invasive plant removal; Planting	61	\$18.04	\$1,100.44
5/19/2005	3	Starbucks	Invasive plant removal	9	\$18.04	\$162.36
6/18/2005	28	Sunset Presbyterian	Invasive plant removal	158	\$18.04	\$2,850.32
6/25/2005	36	NP Nature Explorer's Camp	Invasive plant removal	60	\$18.04	\$1,082.40
7/16/2005	6	Southridge	Invasive plant removal	22	\$18.04	\$396.88
8/20/2005	4		Invasive plant removal	16	\$18.04	\$288.64
8/21/2005	14	Reed College	Invasive plant removal	34	\$18.04	\$613.36
9/7/2005	27	George Fox University	Invasive plant removal	130.5	\$18.04	\$2,354.22
9/17/2005	4	University of Portland	Invasive plant removal	16	\$18.04	\$288.64
9/18/2005	4	University of Portland	Invasive plant removal	16	\$18.04	\$288.64
10/16/2005	30	St. Juan Diego Youth Group	Invasive plant removal	120	\$18.04	\$2,164.80
11/20/2005	4		Planting	12	\$18.04	\$216.48

VOLUNTEER HOURS Time Log

			Totals:	2374.5		\$23,295.02
7/28/2006	36	NP Nature Explorer's Camp	Invasive plant removal	36	\$18.04	\$649.44
7/21/2006	36	NP Nature Explorer's Camp	Invasive plant removal	36	\$18.04	\$649.44
7/14/2006	36	NP Nature Explorer's Camp	Invasive plant removal	36	\$18.04	\$649.44
6/23/2006	36	NP Nature Explorer's Camp	Invasive plant removal	36	\$18.04	\$649.44
6/18/2006	4		Invasive plant removal	16	\$18.04	\$288.64
6/17/2006	3	Nike	Invasive plant removal	12	\$18.04	\$216.48
5/6/2006	12	Merlo HS; Portland State University	Invasive plant removal; Garbage	48	\$18.04	\$865.92
4/22/2006	13	SOLV	Invasive plant removal	52	\$18.04	\$938.08
2/18/2006	14	Westview HS	Invasive plant removal	54.5	\$18.04	\$983.18
2/12/2006	5		Invasive plant removal	20	\$18.04	\$360.80
1/22/2006	4		Invasive plant removal	16	\$18.04	\$288.64
1/21/2006	5	Southridge HS	Planting	20	\$18.04	\$360.80

Date	Name	Activity	Hours	Pay Rate	Extende Value
08/27/03	Elisa Joy Payne	Evaluating and planning	2.5	\$17.00	\$42.50
08/27/03	Ben Pettitt	Evaluating and planning	2.5	\$17.00	\$42.50
09/03/03	Elisa Joy Payne	Evaluating and planning	1.5	\$17.00	\$25.50
09/03/03	Julie Reilly	Evaluating and planning	1.5	\$23.40	\$35.10
09/08/03	Elisa Joy Payne	Outreach	1.0	\$17.00	\$17.00
09/09/03	Ben Pettitt	Monitoring	2.0	\$17.00	\$34.00
09/10/03	Bruce Barbarasch	Volunteer supervision	2.5	\$26.70	\$66.75
09/10/03	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
09/10/03	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
09/10/03	Sean Nystrom	Project preparation	5.0	\$11.00	\$55.00
10/16/03	Bruce Barbarasch	Evaluating and planning	1.0	\$26.70	\$26.70
10/17/03	Ben Pettitt	Evaluating and planning	2.0	\$17.00	\$34.00
10/17/03	Julie Reilly	Evaluating and planning	2.0	\$23.40	\$46.80
10/17/03	Joan Andersen-Wells	Evaluating and planning	2.0	\$30.00	\$60.00
10/17/03	Bruce Barbarasch	Evaluating and planning	2.0	\$26.70	\$53.40
10/18/03	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
10/18/03	Nick Beatz	Project preparation	1.5	\$11.00	\$16.50
10/19/03	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
10/24/03	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
11/01/03	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
11/14/03	Ben Pettitt	Fence installation	2.5	\$17.00	\$42.50
11/14/03	Bruce Barbarasch	Fence installation	2.5	\$26.70	\$66.75
11/16/03	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
12/05/03	Ben Pettitt	Monitoring	1.0	\$17.00	\$17.00
12/09/03	Ben Pettitt	Monitoring	1.5	\$17.00	\$25.50
12/11/03	Nick Beatz	Invasive removal	2.0	\$17.00	\$23.30
12/11/03	Elisa Joy Payne	Invasive removal	2.0	\$17.00	\$34.00
12/11/03	Ben Pettitt		1.0	\$17.00	
01/13/04		Equipment maintenance Trail construction/maintenance			\$17.00
	Nick Beatz		6.0	\$11.00	\$66.00
01/14/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
01/15/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
01/22/04	Bruce Barbarasch	Processing plants for installation	1.0	\$26.70	\$26.70
01/22/04	Nick Beatz	Project preparation	2.0	\$11.00	\$22.00
01/21/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
01/23/04	Elisa Joy Payne	Project preparation	1.0	\$17.00	\$17.00
01/23/04	Nick Beatz	Project preparation	1.0	\$11.00	\$11.00
01/19/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
01/24/04	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
01/25/04	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
01/26/04	Bruce Barbarasch	Evaluating and planning	1.5	\$26.70	\$40.05
01/26/04	Ben Pettitt	Evaluating and planning	1.5	\$17.00	\$25.50
02/04/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
02/05/04	Elisa Joy Payne	Invasive removal	2.0	\$17.00	\$34.00
02/05/04	Nick Beatz	Invasive removal	2.0	\$11.00	\$22.00
02/03/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
02/10/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
02/11/04	Bruce Barbarasch	Processing plants for installation	1.0	\$26.70	\$26.70
02/11/04	Ben Pettitt	Project preparation	1.0	\$17.00	\$17.00
02/11/04	Elisa Joy Payne	Project preparation	1.0	\$17.00	\$17.00

02/13/04	Nick Beatz	Trail construction/maintenance	6.0	\$11.00	\$66.00
02/14/04	Elisa Joy Payne	Fence installation	1.0	\$17.00	\$17.00
02/21/04	Debbie Chittick	Invasive removal	4.0	\$13.00	\$52.00
02/21/04	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
02/22/04	Debbie Chittick	Invasive removal	4.0	\$13.00	\$52.00
02/22/04	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
02/25/04	Elisa Joy Payne	Fence installation	1.0	\$17.00	\$17.00
02/25/04	Nick Beatz	Fence installation	1.0	\$11.00	\$11.00
02/26/04	Nick Beatz	Invasive removal	2.0	\$11.00	\$22.00
02/26/04	Elisa Joy Payne	Invasive removal	2.0	\$17.00	\$34.00
03/10/04	Nick Beatz	Planting	3.0	\$11.00	\$33.00
03/10/04	Ben Pettitt	Planting	3.0	\$17.00	\$51.00
03/10/04	Bruce Barbarasch	Planting	3.0	\$26.70	\$80.10
03/10/04	Elisa Joy Payne	Planting	3.0	\$17.00	\$51.00
03/17/04	Elisa Joy Payne	Fence installation	3.0	\$17.00	\$51.00
03/17/04	Bruce Barbarasch	Fence installation	3.0	\$26.70	\$80.10
02/27/04	Nick Beatz	Invasive removal	5.0	\$11.00	\$55.00
02/27/04	Elisa Joy Payne	Invasive removal	5.0	\$17.00	\$85.00
03/13/04	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
03/15/04	Ben Pettitt	Project preparation	2.0	\$17.00	\$34.00
03/17/04	Elisa Joy Payne	Fence installation	1.5	\$17.00	\$25.50
03/17/04	Bruce Barbarasch	Fence installation	1.5	\$26.70	\$40.05
03/27/04	Elisa Joy Payne	Planting	2.0	\$17.00	\$34.00
04/24/04	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
04/24/04	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
04/24/04	Elisa Joy Payne	Project preparation	2.0	\$17.00	\$34.00
04/24/04	Debbie Chittick	Volunteer supervision	5.0	\$13.00	\$65.00
04/25/04	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
05/14/04	Elisa Joy Payne	Fence installation	1.5	\$17.00	\$25.50
05/14/04	Nick Beatz	Fence installation	1.5	\$11.00	\$16.50
05/17/04	Ben Pettitt	Fence installation	1.5	\$17.00	\$25.50
06/11/04	Elisa Joy Payne	Evaluating and planning	1.5	\$17.00	\$25.50
06/11/04	Katie Lang	Evaluating and planning	1.5	\$26.70	\$40.05
06/12/04	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
06/22/04	Ben Pettitt	Evaluating and planning	2.0	\$17.00	\$34.00
07/01/04	Elisa Joy Payne	Evaluating and planning	3.0	\$17.00	\$51.00
07/02/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
07/03/04	Elisa Joy Payne	Monitoring	1.5	\$17.00	\$25.50
07/23/04	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
07/24/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
07/25/04	Ben Pettitt	Irrigation of plantings	1.0	\$17.00	\$17.00
07/28/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
07/29/04	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
07/30/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
07/31/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
08/06/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
08/18/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
08/20/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
08/21/04	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
09/04/04	Ben Pettitt	Evaluating and planning	1.0	\$17.00	\$17.00
09/08/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00

09/10/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
09/18/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
10/15/04	Elisa Joy Payne	Project preparation	1.0	\$17.00	\$17.00
10/17/04	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
10/27/04	Ben Pettitt	Monitoring	4.0	\$17.00	\$68.00
11/09/04	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
11/13/04	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
11/17/04	Elisa Joy Payne	Processing plants for installation	3.0	\$17.00	\$51.00
11/17/04	Ben Pettitt	Processing plants for installation	3.0	\$17.00	\$51.00
11/18/04	Elisa Joy Payne	Processing plants for installation	1.0	\$17.00	\$17.00
11/19/04	Elisa Joy Payne	Evaluating and planning	1.5	\$17.00	\$25.50
11/20/04	Elisa Joy Payne	Project preparation	1.0	\$17.00	\$17.00
11/21/04	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
01/21/05	Elisa Joy Payne	Project preparation	2.0	\$17.00	\$34.00
01/22/05	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
01/22/05	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
01/23/05	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
02/18/05	Elisa Joy Payne	Project preparation	1.0	\$17.00	\$17.00
02/19/05	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
02/25/05	Elisa Joy Payne	Watering system construction	3.0	\$17.00	\$51.00
05/19/05	Elisa Joy Payne	Project preparation	1.0	\$17.00	\$17.00
05/19/05	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
05/22/05	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
05/25/05	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
06/13/05	Ben Pettitt	Monitoring	4.0	\$17.00	\$68.00
06/17/05	Elisa Joy Payne	Project preparation	2.0	\$17.00	\$34.00
06/18/05	Elisa Joy Payne	Volunteer supervision	8.0	\$17.00	\$136.00
06/25/05	Debbie Chittick	Volunteer supervision	2.0	\$13.00	\$26.00
06/25/05	Camp Staff	Volunteer supervision	8.0	\$10.00	\$80.00
07/15/05	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
07/16/05	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
07/20/05	Elisa Joy Payne	Evaluating and planning	2.5	\$17.00	\$42.50
07/21/05	Elisa Joy Payne	Evaluating and planning	4.5	\$17.00	\$76.50
07/29/05	Elisa Joy Payne	Evaluating and planning	3.0	\$17.00	\$51.00
07/30/05	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
08/19/05	Elisa Joy Payne		1.5	\$17.00	\$25.50
08/20/05	Elisa Joy Payne	Project preparation Volunteer supervision	5.0	\$17.00	\$85.00
08/21/05	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
09/07/05	Ben Pettitt	Volunteer supervision	6.0	\$17.00	\$102.00
09/07/05	Alex Mima	Invasive removal	4.0	\$11.00	\$44.00
09/14/05	Ben Pettitt	Evaluating and planning	1.0	\$17.00	\$17.00
09/14/05	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	
	Elisa Joy Payne	Volunteer supervision			\$17.00
09/17/05	Ben Pettitt		5.0	\$17.00	\$85.00
09/18/05 10/16/05		Volunteer supervision	5.0	\$17.00	\$85.00
	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
10/26/05	Ben Pettitt	Monitoring Evaluating and planning	4.0	\$17.00	\$68.00
11/10/05	Elisa Joy Payne	Evaluating and planning	1.5	\$17.00	\$25.50
11/11/05	Elisa Joy Payne	Processing plants for installation	5.0	\$17.00	\$85.00
11/11/05	Colin Cigarran	Processing plants for installation	2.5	\$11.00	\$27.50
11/12/05	Elisa Joy Payne	Processing plants for installation	1.0	\$17.00	\$17.00
11/14/05	Ben Pettitt	Monitoring	1.5	\$17.00	\$25.50

		Totals	545.0		\$8,629.25
07/28/06	Camp Staff	Volunteer supervision	6.0	\$10.00	\$60.00
07/22/06	Elisa Joy Payne	Irrigating	3.0	\$17.00	\$51.00
07/21/06	Camp Staff	Volunteer supervision	6.0	\$10.00	\$60.00
07/14/06	Camp Staff	Volunteer supervision	6.0	\$10.00	\$60.00
07/08/06	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
07/01/06	Elisa Joy Payne	Evaluating and planning	2.0	\$17.00	\$34.00
06/30/06	Elisa Joy Payne	Watering system construction	1.5	\$17.00	\$25.50
06/29/06	Elisa Joy Payne	Watering system construction	4.0	\$17.00	\$68.00
06/23/06	Camp Staff	Volunteer supervision	8.0	\$10.00	\$80.00
06/23/06	Elisa Joy Payne	Volunteer supervision	2.0	\$17.00	\$34.00
06/22/06	Elisa Joy Payne	Project preparation	2.0	\$17.00	\$34.00
06/21/06	Charlie Nappi	Invasive removal	2.0	\$11.00	\$22.00
06/21/06	Elisa Joy Payne	Invasive removal	2.0	\$17.00	\$34.00
06/20/06	Ben Pettitt	Monitoring	4.0	\$17.00	\$68.00
06/18/06	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
06/17/06	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
05/06/06	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
04/22/06	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
02/18/06	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
02/12/06	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
01/22/06	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
01/21/06	Elisa Joy Payne	Volunteer supervision	5.0	\$17.00	\$85.00
01/20/06	Elisa Joy Payne	Project preparation	1.0	\$17.00	\$17.00
12/09/05	Charlie Nappi	Trash removal	1.5	\$11.00	\$16.50
12/09/05	Colin Cigarran	Trash removal	1.5	\$11.00	\$16.50
12/09/05	Elisa Joy Payne	Trash removal	1.5	\$17.00	\$25.50
11/26/05	Elisa Joy Payne	Evaluating and planning	1.0	\$17.00	\$17.00
11/21/05	Ben Pettitt	Planting	2.5	\$17.00	\$42.50
11/20/05	Ben Pettitt	Volunteer supervision	5.0	\$17.00	\$85.00
11/19/05	Elisa Joy Payne	Processing plants for installation	1.5	\$17.00	\$25.50
11/17/05	Elisa Joy Payne	Processing plants for installation	1.0	\$17.00	\$17.00



NATURE PARK

LEGEND

7" ASPHALT TRAL

S' FATH

TRAL DETARCE (IN MILES)

0.00 GRID SCACING - 200' X 200"





DEC DUCUS FOREST EVERGREEN FOREST

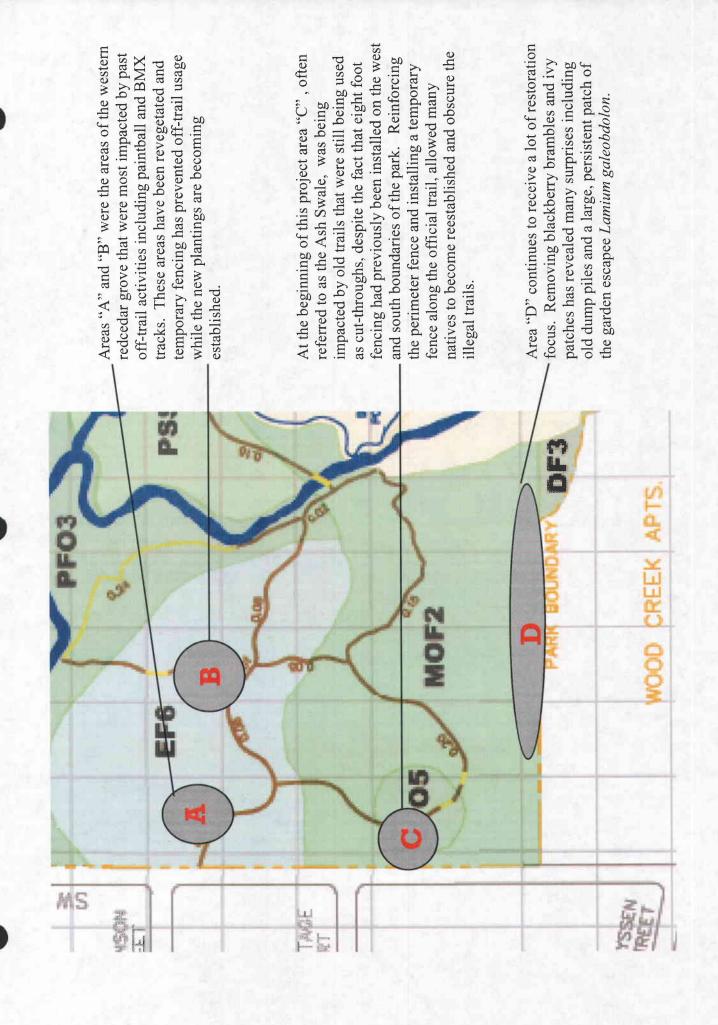
MOF MIXED CAK FOREST

WIXED EVERGREEN-DECIDIOUS FOREST

OW OPEN WATER

PEM PALLISTRINE ENERGENT WETLAND PFO PALUSTRINE FORESTED WETLAND

PSS PALISTRINE SCHUB-SCHUB WETLAND



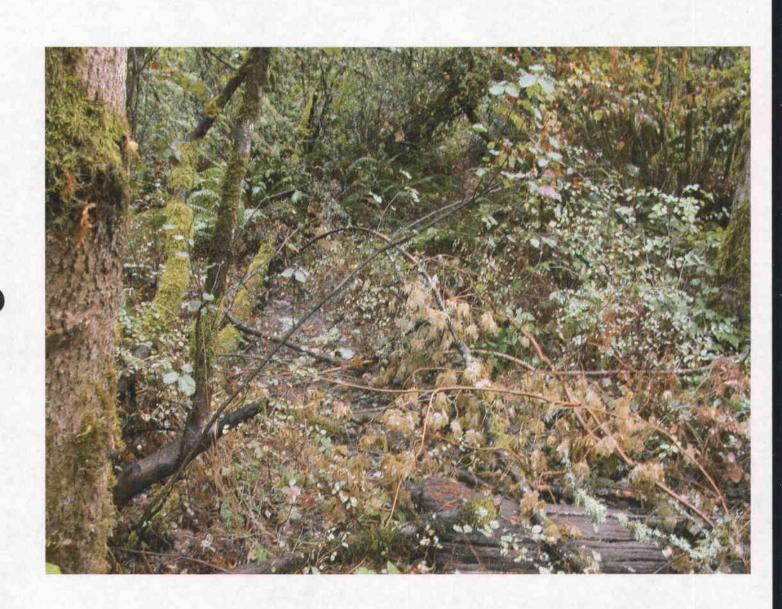
West Woods Photo Point #1

Illegal trail off of the Service Berry trail just above the bench on the West of the Big Pond.



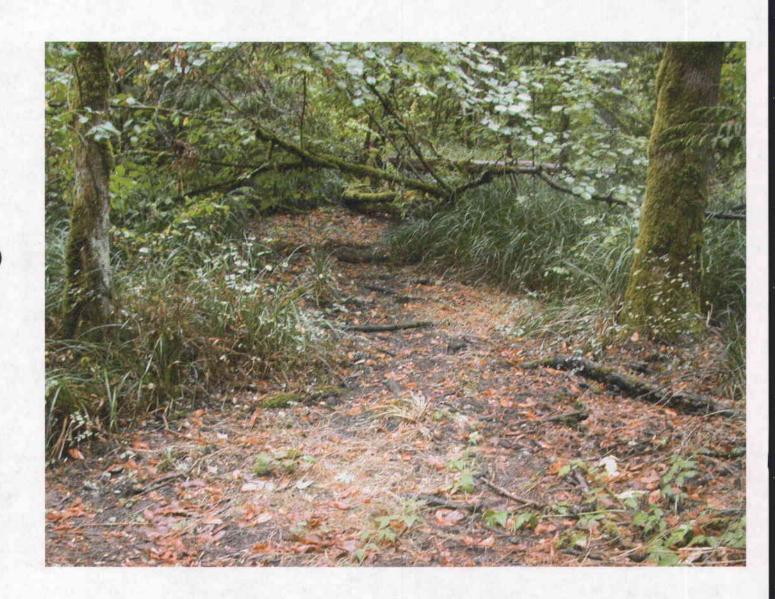
West Woods Photo Point #2

Illegal trail off of the Ash trail.

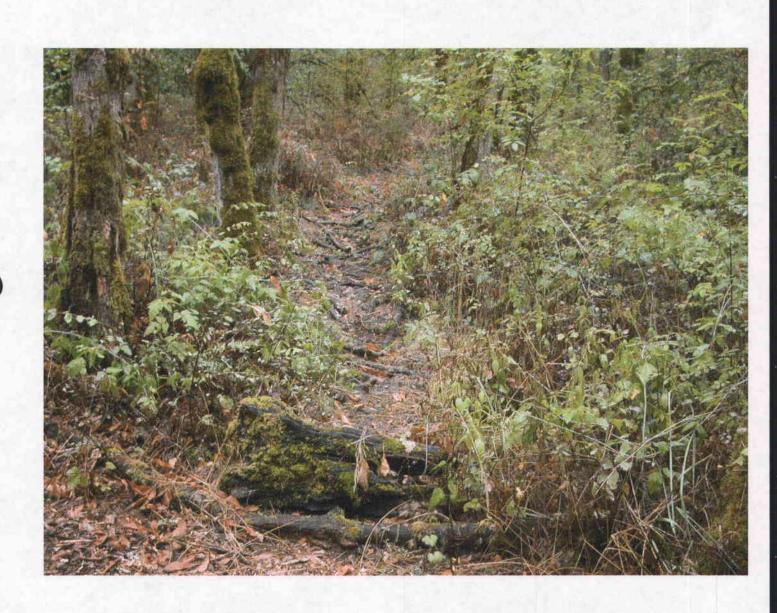


West Woods Photo Point #3

Illegal trail at the intersection of Service Berry and Cedar Grove.



West Woods Photo Point #4
Illegal trail off of Ash trail.



West Woods Photo Point #5
Illegal trail off of Ash trail.



West Woods Photo Point #6E

Taken from an intersection in the Ash Swale located about 100 feet from photo point #4. Shoot facing East.



West Woods Photo Point #6W

Taken from an intersection in the Ash Swale located about 100 feet from photo point #4. Shoot facing West.



West Woods Photo Point #6S

Taken from an intersection in the Ash Swale located about 100 feet from photo point #4. Shoot facing South.



West Woods Photo Point #7.

Taken approximately 4-5 paces in from the fence along a trail that came in from 170th.



West Woods Photo Point #8E.

Sanding at fence along 170 looking down an old trail.



West Woods Photo Point #8W.

Sanding on an old trail looking back towards #8E on 170th.



10 17 03

West Woods Photo Point #9.

Standing at the corner of the fence in the South-West corner off 170th looking west.



West Woods Photo Point #10N.

The old entrance at Wood Creek Apartments. Taken from 4th post in from the South-West corner off of 170th looking North.



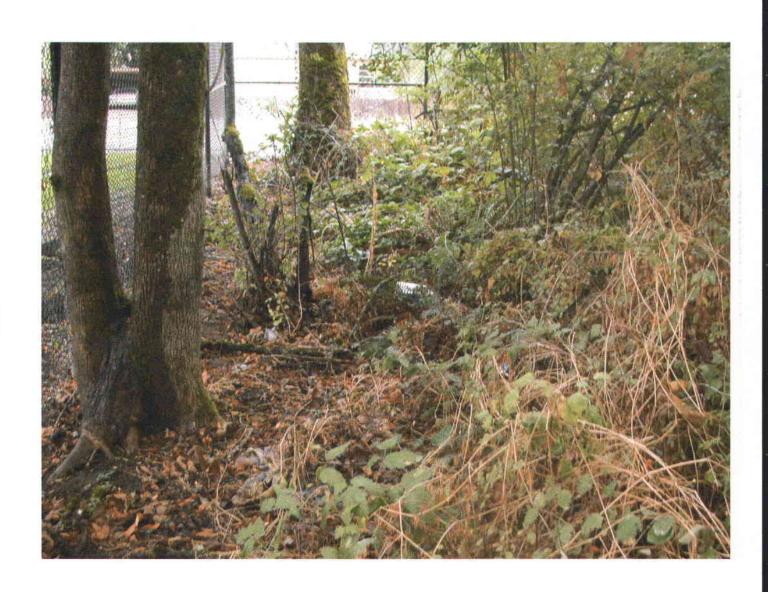
West Woods Photo Point #10E.

The old entrance at Wood Creek Apartments. Taken from 4th post in from the South-West corner off of 170th looking East.



West Woods Photo Point #10W.

The old entrance at Wood Creek Apartments. Taken from 4^{th} post in from the South-West corner off of 170^{th} looking West.



West Woods Photo Point #11.

Taken from the 17th post in from the South-East end of the fence. Looking North-Northwest looking down an old trail.



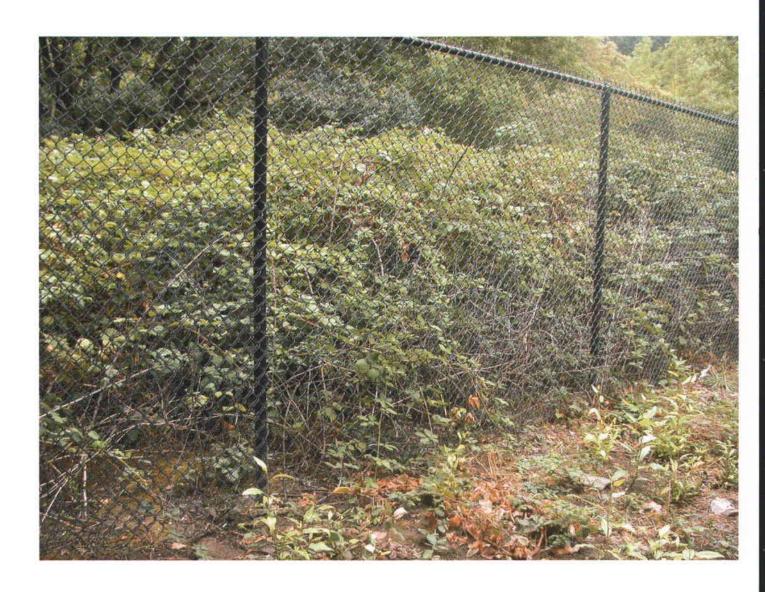
West Woods Photo Point #12.

Taken from the East corner of the first garage building from the East. Looking West down fence line



West Woods Photo Point #13.

Taken from the West corner of the first garage building from the East. Looking East down fence line.



West Woods Photo Point #14.

Taken from the 10th post in from the East end of the fence. Look West down fence.



10 17 03

West Woods Photo Point #15.

Taken from the 2nd post in from the East end of the fence. Look West down fence.



West Woods Photo Point #16.

Illegal trail off of the Cedar Grove trail just down from the kiosk. It is at the first corner turning right, looking North.



Lamium Patch

This patch is located just North of photo point #14.



10 17 03



10 17 03

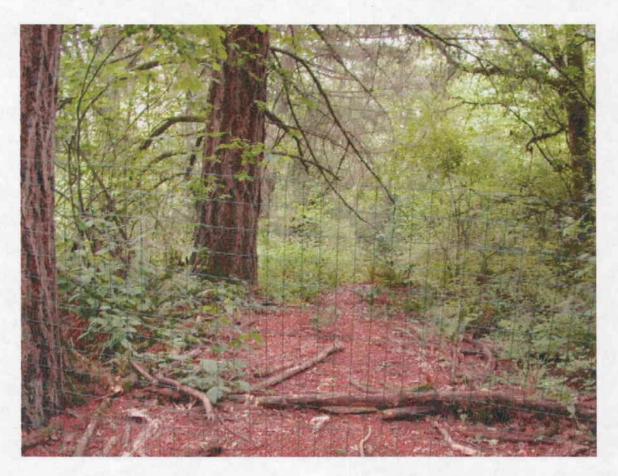


10 17 03



10 17 03

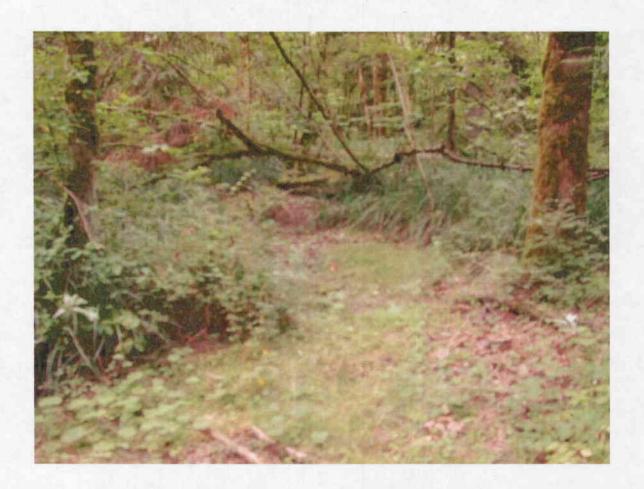




06.22.04



06.22.04



06.22.04



06.22.04



06.22.04



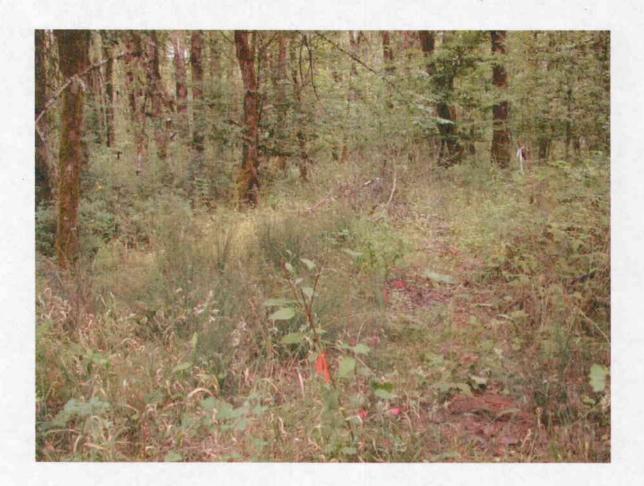
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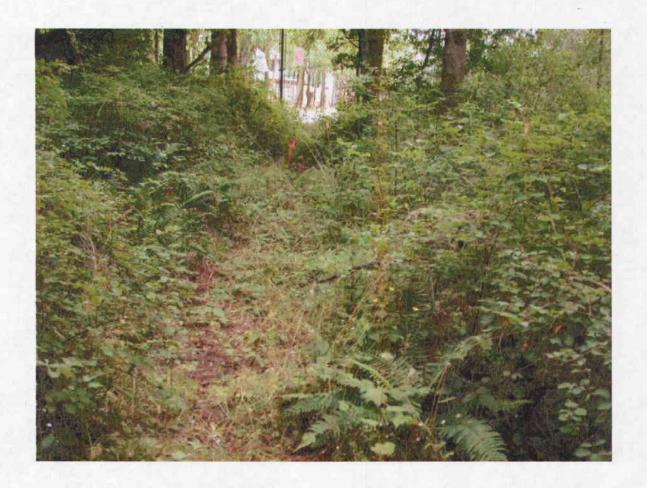
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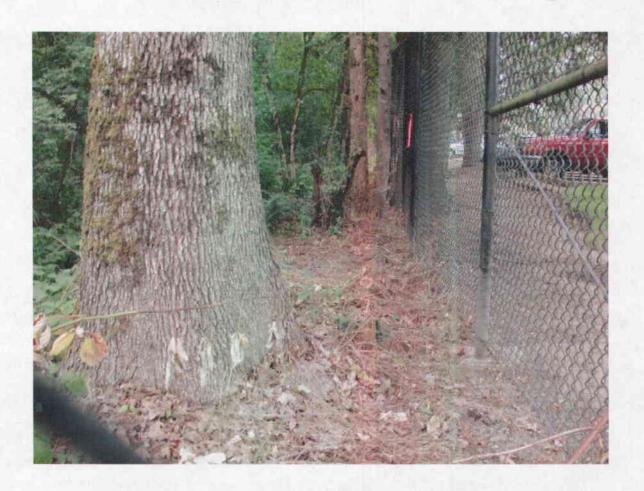
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06.22.04



06.22.04



06.22.04

Photo Point #10E



06.22.04



06.22.04

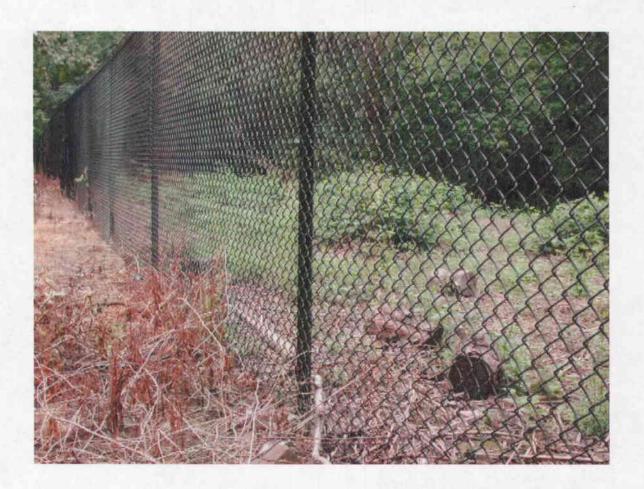
Photo Point #10W



06.22.04



06.22.04



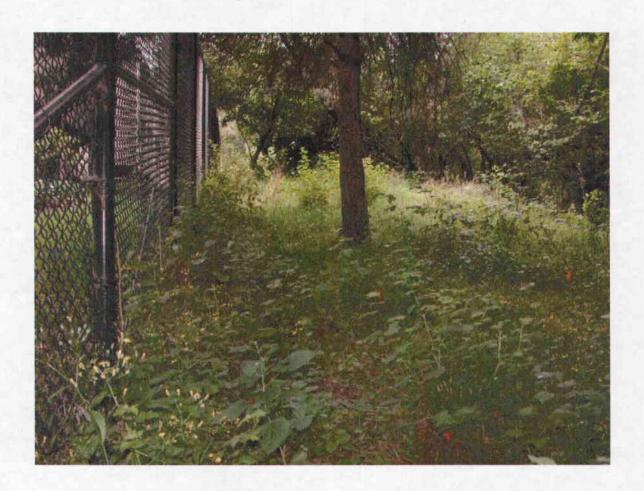
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06.22.04



06.22.04



06.22.04

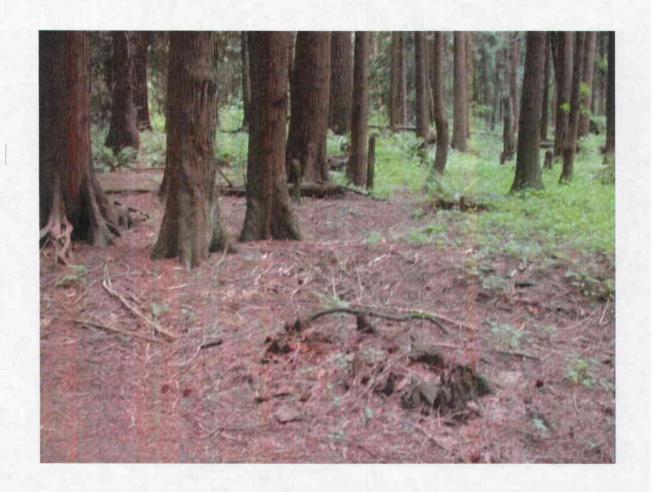


06.22.04

Study Plot #10



06.22.04



06.22.04



06.22.04